

A Vision for the Future of Web Education

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Executive Summary

As a W3C Incubator Group, the Open Web Education Alliance (OWEA) is focused on solidifying its vision and strategic initiatives. With a goal towards establishing a new field of study in Web Craft and to cultivate symbiotic relationships between industry, research and education, OWEA is working towards four main strategic initiatives:

- Establish Web Education as a W3C Activity, where the Open Web Education Alliance is a self-sustaining entity that engages practitioners, educators and researchers while simultaneously furthering the potential of the web and society.
- Create Web Craft pilot programs in at least one university, one community college and one high school.
- Adopt suitable teaching resources (such as the InterACT Curriculum Framework, Opera Web standards curriculum, etc.) and create a course content policy to facilitate its evolution to meet the needs of educators, industry and the open web.
- Establish outreach activities to target educators, school and university administrators, businesses and clients, students and parents, trainers, web professionals, government, media and the wider public.

This whitepaper is a document in outlining the considerations, recommendations and directions the Alliance intends to undertake.

Web Craft: A Degree Field to Sustain the Web Ecosystem

The Open Web Education Alliance (OWEA) seeks to establish a new field of study in Web Craft to sustain and continue the evolution of the open Web for the benefit of society. OWEA's activities are in harmony with the Web Science Research Initiative begun in 2006.

THE NEED FOR WEB CRAFT

The web is one of the most significant inventions in human history because it allows individuals to freely share and build knowledge. Invented in 1991 by Tim Berners-Lee, the web is the largest information construct of human civilization and has been growing at an exponential rate. It has found its way into our offices, our homes, our pockets, and even our appliances.

However, because the Web is still so young, the people who built it never received a formal education in how to work on the Web. For most, that educational option simply didn't exist. And in many cases, it still doesn't.

The Web cannot reach its full potential if it doesn't master the art of cultivating new talent. This requires close ties between researchers, practitioners and educators. The field of Web Craft needs to be established in formal education systems worldwide. Establishing a Web Craft curriculum allows us to purposefully study and thoughtfully evolve the future of the Web for the benefit of both the industry and society.

OWEA MOTTO

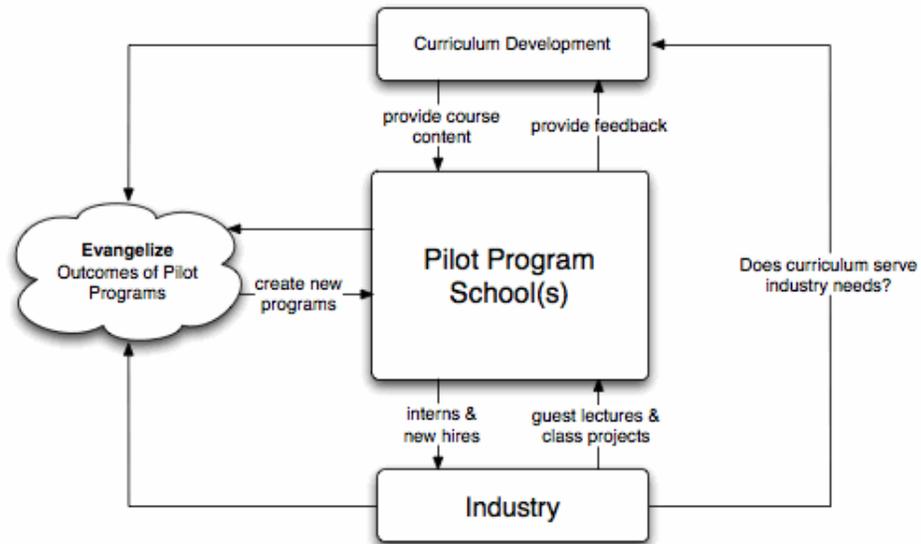
Web Education: A better web for a better world.

OWEA VISION

Our shared vision of the desired future state of web education.

- **Web Craft Degree**—A new field of study in Web Craft in Universities, Community Colleges and High Schools worldwide.
- **Web Craft Curriculum**—A living curriculum framework that emphasizes best practice and open web standards. Curriculum is adaptable to the needs of Universities, Community Colleges and High School.
- **Sustainable Web Ecosystem**—The web is an ecosystem of interdependent disciplines. A universally beneficial web is based on a collaborative model that balances the needs of education, research and industry.

Open Web Education Alliance Structure



- Usable and Practical Web Standards—Web Craft educators provide valuable feedback on how to make web standards as teachable, learnable and intuitive as possible. Industry and practitioners advocate for web standards that are feasible and solve real world problems.
- Web Career Pathways—Clear definitions of roles and competencies refine the web profession. Individuals understand how to enter, successfully develop and navigate within the web profession.

OWEA VALUES

Qualities that are the foundation of OWEA and support forward movement.

First and foremost, we believe in the open web.

We desire to be and promote being:

- Adaptable
- Collaborative
- Diverse
- Helpful
- Inspirational
- Respectful

We seek to build productive solutions that are relevant and sustainable.

Contributing Organizations

We appreciate the efforts and hard work of organizations and individuals who have contributed to the creation of OWEA and the completion of this whitepaper. Since the individuals involved work for a variety of organizations, it should be noted that we appreciate those organizations for their generosity in enabling these contributions. These organizations are listed below in alphabetical order.

Adobe



AIGA

(the professional association for design)



The Benwood Foundation

BENWOOD FOUNDATION

Iconologic

Iconologic

The University of Tennessee at Chattanooga

THE UNIVERSITY of TENNESSEE **UT**
CHATTANOOGA

The Lyndhurst Foundation



WOW (World Organization of Webmasters)



Opera Software ASA

WaSP InterACT



Web Directions



OWEA Strategic Initiatives for 2009-2010

In order to make the OWEA Vision a reality, we will focus on the following initiatives in 2009-2010:

1. **Web Education W3C Activity**—Establish the Open Web Education Alliance as a sustainable W3C Activity that engages practitioners, educators and researchers while simultaneously furthering the potential of the web and society.
2. **Web Craft Pilot Programs**—A model Web Craft program in at least one university, one community college and one high school.
3. **Open Web Education Curriculum**—Adopt the InterACT Curriculum Framework and create a course content policy to facilitate its evolution to meet the needs of educators, industry and the open web.
4. **Initial Outreach Activities**
 - Web Education Rocks Bands (Local Chapters)—provide an opportunity for people to affiliate with the open web cause and contribute to the improvement of web education.
 - Web Education Rocks Tours—Face-to-Face events where web educators and experts share the vision, curricula and success stories of the next generation of web professionals.

Recommendations for each of these strategic initiatives are discussed in the sections to follow.

Web Education: A New Activity for the W3C

For the last dozen or so years, colleges and universities around the world have been struggling to determine where the Web fits into their curriculum. Some see it as programming and combine it with the computer sciences. Others see it as design and organize it under the arts. In truth, work on the Web encompasses both of these and far more, making the notion of a “School of Web”, much like a School of Law, perhaps more realistic and practical than we may have dared to entertain. [1st ed: in keeping with use of “Web Craft” in the strategic vision section, should this be “School of Web Education” or “School of Web Crafts”?]]

In an effort to thoughtfully consider the concept of a School of Web, the Open Web Education Alliance (OWEA) was formed as a W3C Incubator Group. Comprising educators, representatives of industry and other interested parties, OWEA has been working to create a roadmap for Web education realized in the School of Web. As part of that effort, the group has been considering its future organizational options after its current Charter expires. After weighing all of the options, the group strongly believes that this effort would best be undertaken as a new W3C Activity.

THE OPTIONS

When considering the type of organization OWEA should become, the group evaluated three options:

- Organizing as a for-profit corporation,
- Organizing as a non-profit corporation, and
- Organizing as a part of another organization.

Each option was considered in terms of its legal structure, the costs involved in both establishing and running the organization, how intellectual property would be handled, the degree of autonomy that would be afforded to the organization, where it would be organized, its effect on the organization’s ability to secure partnerships, whether or not it would be tax-deductible for donors to fund the organization, the time to market for organizing the entity, and its effect on the overall income prospects (e.g. the organization’s ability to secure grants).

OPTION 1: FOR-PROFIT CORPORATION

Going into the discussion, the option to become a for-profit corporation was a possibility, but by no means a front-runner in anyone’s mind. The group felt it was worth considering as it could be set up to act like a non-profit, has the

advantage of being established in a day or less within the United States, and would cost less than establishing a charitable non-profit.

Being a for-profit corporation has one advantage beyond those already mentioned: the ability to establish franchises around the world. This would come into play if the organization were to focus on accreditation (an option under any of the organizational structures) and seek to establish local offices tasked with policing local institutions. Such a move could take some of the pressure off of the central organization, but it could also create more work if there is ever a communication breakdown.

While the group found few compelling reasons to organize as a for-profit corporation, it found several not to. First of all, establishing itself as such meant that the organization would not have any immediate credibility beyond that imbued to the organization by its founders. The for-profit status of the organization could also be its Achilles' heel as individuals within the community would have an immediate reason to question any recommendations the organization makes as an effort to increase revenue. Moreover, the group felt it would be more difficult, if not impossible, to get grants to support the organization's work. Then, there is the question of how shareholders are determined.

Examined as a whole, this option was clearly not the route the group wanted to take.

OPTION 2: NON-PROFIT CORPORATION

When the organizational discussion began, the non-profit option, specifically a charitable non-profit, was the front-runner. Similar to a for-profit organization, it allows for a complete autonomy, provides a tax-deductible incentive to donors, is more likely to be favored in the allocation of grants, and is more likely to be viewed in a positive light by the web community as it is decidedly not focused on generating revenue and has no shareholders pulling the strings.

The process for establishing a non-profit corporation in the U.S. takes roughly a day, as it is with a for-profit. Taking things a step further and getting certified as a charitable organization — a 501(c)(3) in the U.S. — can take 6-12 additional months and requires significant legal assistance. The delay and added cost, when coupled with the concern over a lack of immediate credibility — which was shared in the consideration of for-profit status — made this option less appealing than the group's original consideration.

OPTION 3: PART OF ANOTHER ORGANIZATION

As an Incubator within the W3C, the group felt strongly that OWEA should

consider establishing itself as a formal part of the W3C (or some similar) organization. Other options that were considered included the Web Foundation, OASIS, WOW, and ISO.

The benefits of becoming part of another organization are numerous. First of all, the organization would have already established an intellectual property policy, which could be adopted and would not require this organization to devote resources to establish legal frameworks. Secondly, such a move could give the project immediate credibility within both industry and education. Finally, depending on the organization, there may already be an established means of receiving donations and grants.

On the other hand, operating within another organization could have some drawbacks. First of all, the parent organization may have some credibility issues of its own which could be transferred to this organization as well. There is also a question of how much autonomy this organization would be granted by its parent and how much resources the parent organization can make available to this fledgling project. Finally, there's always a possibility that the parent organization would decide to close down this group for any of a number of reasons (e.g. political, financial, etc.).

During the discussion, however, one option was surfaced that really seemed to stand out: establishing Web education as a W3C Activity. The process for establishing a W3C Activity takes 3-6 months. The first step is to draft a Charter. That Charter is then reviewed and commented on by the W3C membership. Issues that are raised during that review period are evaluated and either addressed or dismissed before the Charter is submitted to W3C management for approval. The final decision is made by W3C management.

THE PROS AND CONS OF BEING A W3C ACTIVITY

When it came to the W3C, the group was not quite sure how its activities would fit in. Most of the visible activity within the W3C involves the authoring of specifications for the Web, but, through the group's discussion, it became clear that there are some activities taking place within the W3C that more closely relate to the sort of work OWEA would be doing.

The Web Accessibility Initiative (WAI) was established as a Domain within the W3C, but funds many of its own activities and staff through grants. Similarly, the Mobile Web Initiative was created as an Activity within the Ubiquitous Web Domain, and has a dedicated funding stream through sponsors. Each of these has a degree of autonomy and even provides a good deal of its own funding; Domains are also given a literal "seat at the table" as the Domain's director is considered part of W3C management. The organizers of OWEA would like to

keep the future option open of being considered as a Domain if W3C management determines it appropriate. Future reasons for OWEA being reviewed as a possible Domain include the opportunity for direct contribution to management decisions, and because the activities and goals of OWEA could be sufficiently different from the other W3C Domains that there would be benefits to direct representation. However, it makes more sense for OWEA to be established as an Activity within a related Domain.

The W3C is flexible on the way in specific activities are organized and managed, which is a major benefit. W3C activities can leverage the existing W3C membership and dues structure, but in the case where this is not sufficient to the needs of the activity, they may supplement this with their own participant and funding models. Going forward, funding for W3C activities can be routed through the Web Foundation, earmarked for specific initiatives, reducing the need for staff to handle funds processing, etc.

For this project, the benefits of organizing as a W3C Activity are quite clear, but it is not the only party that stands to gain from this relationship; the W3C would also benefit in several ways. For one, this is an opportunity for the W3C to increase its membership and further relationships with educational institutions in a capacity beyond research and development. The creation of a School of Web will also promote the use and expand the acceptance of Web standards, helping speed adoption and possibly speed uptake of new standards as the students of such a program go to work for more and more implementers throughout the industry.

Finally, and in what is of perhaps the most profound benefit, the W3C stands to gain a clearer perspective from the broader educational community: the teachability of current and proposed standards. It is this group's hope that, as an Activity of the W3C, the Web education effort would foster a "feedback loop" for educators to provide much needed commentary on how teachable proposed specifications are. This alone is a huge opportunity for the W3C as it allows the organization a preview of how clear the spec is in addition to whether it is likely to be taught and, thereby, used in the real world.

One concern the group has regarding being a part of the W3C (or any organization) regards both resources and organizational priorities. Depending on how quickly this project ramps up and the directions in which it grows, one of two conflicts could potentially arise: 1) this project grows so large or so fast that it overwhelms the parent organization's resources, making it a liability for that organization in terms of manpower and a distraction in terms of direction; 2) the project's goals, as they develop over time, begin to move away from the goals of the parent organization to the point that the synergy is no longer there. The group hopes that neither of these happen, of course, but feels

strongly that any organizational language allows for this project and the parent organization to separate amicably should either scenario arise.

The strongest concern raised with regard to becoming a W3C Activity centered around proprietary versus open technologies and W3C specifications versus external standards and languages. The W3C obviously favors open technologies and will not include proprietary technologies within its specifications. In the real world, however, Web design and development requires pragmatism and use of the best tool for the job. Would the W3C be averse to educational work by this organization that involved Flash? What about PDF, PHP or Quicktime?

This organization's core focus is not, of course, to promote the proprietary technologies of member or non-member corporations, but rather to establish a practical and useful educational framework. To ignore such technologies would devalue the organization's efforts. The goal of this organization is to promote best practices within the industry, regardless of technological origin or who owns the intellectual property behind them.

In the end, however, OWEA is hopeful that these concerns will be able to be addressed in light of the mutual benefits to be reaped by organizing its Web education efforts within the W3C.

FINAL RECOMMENDATION

In the view of OWEA, it makes the most sense for Web education to become an Activity of the W3C and for all future operations of this group to be subsumed therein. The group feels that the relationship would be one of mutual benefit and is confident that it will strengthen the Web as a whole. By creating a new Activity for Web education, the W3C will continue to take an active role in improving the Web as it currently exists and in shaping the Web of the future.

Membership

The model we have taken is one of a tree, which grows up from its roots (the core team) up to the leaves (individual educators). Various levels of participation considered include:

- The core team
- Project leaders
- Project members
- Schools and other organizations running OWEA programs
- Individual educators, students and web professionals

A separate kind of participant is a “patron” or “sponsor”, who would help resource the organization, but not necessarily participate directly in the activities of OWEA.

The goals of OWEA in regard to participation are:

- To create a sustainable community, with succession always in mind, and is not overly reliant on the efforts or drive of any individual members
- To distribute responsibility as much as possible toward the “leaves” of the OWEA tree
- To be a fundamentally practical organization - project and outcome based
- To continually identify future leadership within the organization, and promote such members to more responsible positions within the OWEA structure
- To always work toward making the current level of “root” decision makers redundant

We are mindful of challenges around the term “membership” and “member” and use these as shorthand for various kinds of participation in OWEA activities. We do not see a direct overlap in terms of W3C membership and OWEA “members”; the terminology used for OWEA participation is very much open to finessing.

CORE TEAM

Membership of this core team is a responsibility, not a privilege. The core team will comprise very experienced “emeritus” members of OWEA, along with the leaders of each of the current OWEA projects.

The role of members of the core team is to ensure the difficult tasks are done, among them:

- Maintaining resourcing
- Making challenging decisions
- Taking responsibility for the direction of OWEA by deciding which new projects will be undertaken
- Deciding who will replace current members of the core team

PROJECTS

As an outcome-based organization, one of the most significant parts of the OWEA will be its projects. These would be short-to-medium term activities focused on specific goals, such as the development of a particular course. Some activities, like outreach or curriculum development, may be ongoing efforts with periodic goals.

Examples of the kinds of project that OWEA may charter would include:

- Outreach to schools and individual educators
- Organizational projects such as marketing and communications, and membership
- Curriculum development - from individual courses to whole curricula
- Developing accreditation schemes

Project leaders will form a part of the core team, while project participants will hopefully form the basis of future leaders within the organization. Projects would typically be undertaken by small teams of volunteers, with expertise in the area of the project and a commitment to the core OWEA principles.

Project participants will be expected to:

- Use best practices and open web standards as much as possible in personal and professional work
- Regularly read OWEA communications, participate in discussions and provide timely feedback

"SCHOOL" PARTICIPANTS

"Schools"—whether high schools, colleges, universities, or commercial providers, can participate in OWEA in a number of important ways:

- By implementing OWEA curricula and courses
- By making the core principles of the open web a key part of their courses and training

- By contributing courses and curriculum materials to OWEA
- By making material contributions (venues, staff, financial and other) to furthering OWEA's aims

We have yet to finalize discussion on is whether school, organizational and institutional membership might fall into two categories

- A "supporter" level, for organizations who embrace the principles of OWEA, or are using OWEA's courses
- A "partner" level, for organizations which make material contributions to sustain OWEA

Note that there should never be a cost associated with using OWEA courses, curricula or resources for institutions or individual educators.

Individual Participants

There are several ways in which individuals will be able to contribute to and participate in OWEA.

- Leaders in the core team, including project leaders
- Participants volunteering their energy and expertise to various OWEA projects
- Champions, who organize at a local level to promote the principles of OWEA through local "chapters"
- Participants in local chapters who put into practice the principles of open web education in their schools and organizations, are industry professionals keen to ensure the best possible educational outcomes for future professionals, or are students in the field.

CHAMPIONS

OWEA champions (or "evangelists") not only embrace the principles and practices of OWEA in their work as educators, web professionals or students, but promote these ideals to their colleagues and peers. One significant way they will do this is via local "Chapters" along the lines of AIGA local chapters (<http://www.aiga.org/content.cfm/chapter-start-new>).

MEMBERS

OWEA "members" participate at a local chapter level—meeting on a semi-regular basis and sharing their experiences, knowledge and expertise as educators. They may share as educators, as web professionals sharing their expertise, or as students.

CHAPTERS

OWEA Chapters are loosely modeled on AIGA Chapters, but also Refresh, Ignite and other semi-regular meetups of associated professionals. Their goals are to:

- Promote the ideals of OWEA
- Connect like-minded educators and students with professionals in the industry

SPONSORS

“Sponsors” are companies, schools and other organizations which embrace the principles of OWEA, and participate in OWEA activities, while making material contributions to OWEA (their employees may be core members, or they may provide financial or other support to OWEA).

PATRONS

Patrons are individuals and organizations who believe strongly in the principles of OWEA and make material contributions to the organization. These may be financial, or in kind contributions which directly help further the efforts of OWEA.

Course Content Policies

The Open Web Education Alliance's mission to help enhance and standardize the architecture of the World Wide Web by promoting web standards and industry best practices in education centers upon the evaluation and development of curricula materials. As such, OWEA must have clear policies regarding course materials, and strategies to either create pedagogical materials or evaluate and recommend them.

STRATEGIES FOR CURRICULA

There are three primary strategies for course content management that the group considered:

- Curriculum review system to accredit existing curricula
- Curriculum best practices graded support system to guide schools in building curricula
- Creating a standard curriculum or developing an existing curriculum

OPTION 1: CURRICULUM REVIEW SYSTEM

A curriculum review system would require a detailed evaluation of the content being taught in all web technology courses in schools seeking accreditation by OWEA. Such an accreditation would be seen as a "seal of approval" by a respected authority on web standards and best practices, and would be perceived by schools as a valuable way to recruit new students seeking to get relevant training that would prepare them for a successful career in the Web industry.

An accreditation system has three significant challenges that make it an unlikely option for OWEA to pursue. First, creating a detailed accreditation process would be complicated. Syllabi, assignments, lab exercises, and grading policies would have to be reviewed extensively, which requires specialized evaluation instruments that would be time consuming to produce.

Second, accreditation processes require a great deal of preparatory work on the part of the school being evaluated. Schools would need to assemble all of their teaching materials, and student work for the review committee to evaluate. It's a significant time and resource commitment that would have to be perceived as valuable enough to warrant the investment.

Lastly, OWEA itself would need to invest a great deal of time, money, and resources to the initiative as the review team would have to travel a great deal,

be trained in accreditation practices, and perform regular reviews of schools during and after accreditation. This would take much time to achieve.

OPTION 2: CURRICULUM BEST PRACTICES GRADED SUPPORT GUIDE

Rather than handling the evaluation of curricula itself, OWEA could develop a system that outlines best practices to be taught and a list of concepts and techniques that should be avoided. This system would serve as a guide for schools to evaluate their existing curricula and identify areas where changes should be made. This approach eliminates many of the resourcing challenges of an accreditation system, but is not without its own shortcomings.

A graded support system would need to specifically name technologies that are outside of the W3C web standards recommendations and the best practices in industry. Labeling certain technologies as inappropriate for the classroom could put significant strain upon the relationship of the members of OWEA when participating organizations are the originators of a proprietary technology being black listed.

A graded support system would require that schools interpret recommendations and create their own course material from it. Recommendations could easily be misinterpreted resulting in course content that is not inline with OWEA goals and industry needs.

OPTION 3: CREATE AND/OR ADOPT AN EXISTING CURRICULUM

There is a great deal of merit in establishing a curriculum inside of OWEA rather than evaluating external curricula being taught in schools. An OWEA curriculum would be more easily maintained by the educators and industry professionals in the group who are experts on the content. When technology changes in the industry, a central curriculum could be easily updated. This would be a particular selling point to faculty and staff who struggle to stay current with trends while trying to keep up with a normal teaching workload.

Though OWEA could certainly author a curriculum from scratch that fosters web standards and industry best practices, it is perhaps unwise as there are already a number of OWEA members working on curricula that could be integrated into a single, cohesive system. The WaSP InterACT curriculum (<http://interact.webstandards.org>), Opera Web Standards Curriculum (<http://opera.com/wsc/>), and select content from the Yahoo Juku training program are already being combined. Adobe has also created a wealth of valuable educational

material that could be integrated into this curriculum collaborative. The WaSP InterACT curriculum already has a framework for content development and contributions of courses, assignments, and learning modules, making it strong option for OWEA to use as a foundation to build upon.

CURRICULA STRATEGY RECOMMENDATION

Though all options discussed have merit, adopting and expanding upon an existing curriculum like WaSP InterACT is perhaps the most practical of the three in terms of time and resources required to reach OWEA’s goal of improving web education around the world. While the OWEA organizational structure is still being defined, the development of each of the above curriculum projects continues, thus giving OWEA a significant head start immediately upon official launch.

Pursuing the option to adopt an existing curriculum raises some challenges and concerns to be addressed.

OWNERSHIP OF CURRICULUM INITIATIVES

As OWEA combines the curricula of its various members, issues of ownership will arise. In reference to Figure 2 below (Course Structure), it is recommended that any tool and technology-agnostic Core Course Content be either created directly within or donated to OWEA to provide a consistently-managed central core of curriculum. For content created by for-profit organizations which support OWEA principles while focusing on tool and/or technology-specific topics (i.e. Vendor-Specific Learning Modules), it is recommended that the content be hosted and maintained on the authoring organization’s website, and linked to from within the OWEA curriculum.

In the case of The Web Standards Project’s InterACT curriculum, the project’s leadership is open to moving the initiative into OWEA within the W3C. Alternatively, InterACT could continue to operate outside of OWEA, and be guided by OWEA inputs.

CURRICULUM CONTENT AND PRODUCTION

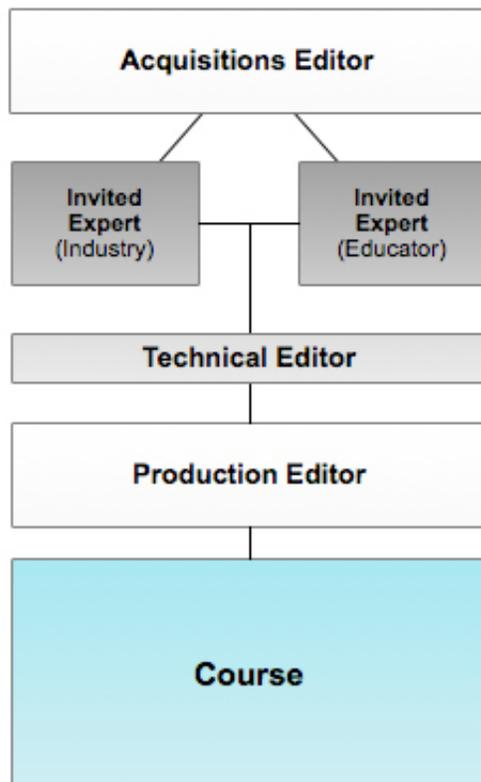
Above all, the OWEA curriculum should be practical and directly related to the needs of the web industry. In addition to teaching web standards, the curriculum should contain best practices in user science, professional practice, design as it relates to the web, and server-side technologies, as all of these sub-

disciplines and their relationships must be understood in order for students to be successful in their careers. Though W3C technologies and their best practices would be the heart of an OWEA curriculum, they should be presented in a real-world context. Presenting web standards abstractly in a purely academic fashion would undermine the mission of OWEA, which seeks to promote the growth and sustainability of the Web by ensuring students graduate ready to innovate and succeed in industry careers.

All courses and supporting material would adhere to a strict structure and style guide. The WaSP InterACT curriculum already has a series of style guidelines and course content templates that would keep all contributions in a consistent form. These style guides would also be evaluated in real-world situations in schools around the world to ensure they are usable by educators.

Courses would be authored in teams of invited experts following a traditional publishing model. A domain expert from the industry would work in tandem with an educator to author a course. A technical editor would review course material as it is being developed. A production editor would guide course authors through issues of structure and form, and would manage the production schedule. An acquisitions editor would assemble the team and coordinate all efforts. See figure 1.

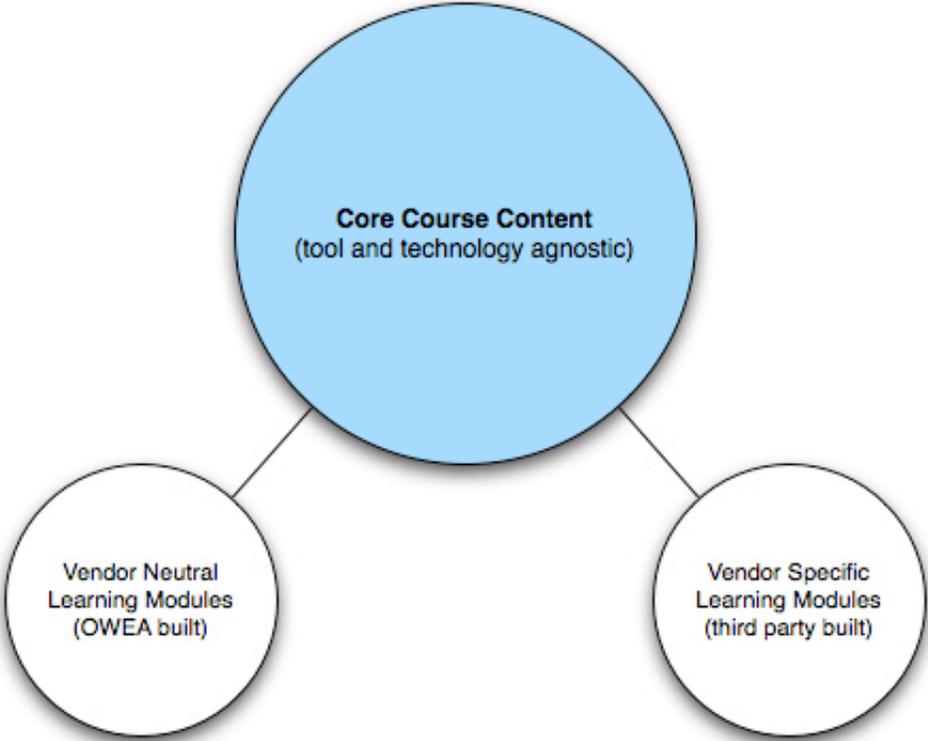
FIGURE 1. COURSE DEVELOPMENT STRUCTURE



Production editors would be responsible for future review and revisions of courses to keep them up to date and relevant to industry needs. Courses will undergo a review annually and be updated accordingly by the course production editor, and an invited expert.

Each course would have a vendor neutral core consisting of competencies, readings, assignments, and exam questions. Learning modules would be created as guides to classroom instruction on topics defined in course competencies. Third parties could contribute learning modules that teach proprietary technologies while adhering to the core principles and best practices of the course. See figure 2.

FIGURE 2. COURSE STRUCTURE



In the case of courses that address important technologies that have divided support yet are centrally relevant to the industry such as server-side scripting, a core course that includes common competencies would be created. It can then be forked to address language-specific issues with additional competencies and learning modules, though assignments and even many exam questions can be shared. Patterns and frameworks research would be encouraged in such courses so students would be afforded the opportunity to critically review competing concepts.

CONTENT OPENNESS, LOCALIZATION, AND EXTERNAL CONTRIBUTIONS

Though the core of all courses would be developed inside of OWEA, educators and experts from around the world would be encouraged to develop assignments, exam questions, and learning modules for courses. Externally developed content would be reviewed by OWEA for content accuracy, fidelity to form, and appropriateness for the course before publication. Should contribution volume increase to a level difficult to manage, OWEA may consider a more general moderation system with user rating systems that allow quality content to float to the top.

Educators would also be encouraged to contribute teaching notes offering fellow educators guidance on pedagogy, classroom strategies, and how to address learning challenges. Open contributions to the OWEA curriculum affords the opportunity for educators around the world to solve localization issues that course authors may not have considered, and creates community and goodwill around the project.

Intellectual Property Policy

This information is predicated on the assumption that the OWEA will become a part of the W3C. As such, it is assumed that the intellectual rights policies of the W3C will apply to works of OWEA and participants in that endeavor. Should this not happen, this section will need to be reviewed/ revisited in light of an alternate organizational model.

Those submitting work within OWEA should be aware of the following notes:

Copyright—the original owner of the document retains copyright, but agrees to the W3C license for redistribution of those materials. Additionally, “W3C documents can be redistributed or republished on the condition that you provide information so that others can easily find the original document, that you provide notice of the W3C’s copyright, and that if the document has a “STATUS” section, you reproduce it.” source—Section 5

We recommend that anyone submitting work to OWEA review the W3C Intellectual Rights FAQ page prior to submitting their work.

Sustainability and Resourcing for OWEA

As OWEA seeks to impact change on a global scale, we must take great care to structure the organization in a manner which facilitates ease of operation, fosters growth and accommodates for changes in leadership while operating efficiently based on sound financial planning.

This section identifies several key areas affecting our ability to build OWEA into an entity that is capable of sustaining itself in perpetuity from an organizational perspective.

- Structure
- Strategic Initiatives
- Partnership
- Funding

Additionally, an initial set of recommendations for consideration have been included at the bottom of the document.

RECOMMENDATIONS

STRUCTURE

Recognizing that we are an early stage, non-profit entity initially deriving all personnel support from volunteers, the organization must account for both turnover and growth challenges over time. The following is to be considered:

LEADERSHIP ROLES

Consideration is being given to initially establishing the following participatory roles within the organization:

- Executive Board - consists of a President, Vice President, Secretary and Treasurer
- Chairs - responsible for specific aspects of the organization's function (i.e.—communication, membership, curricula, events, etc.)
- Committees—unspecified number of individuals assigned to a specific Chair.

As the organization matures, other changes may occur such as:

- The number of chairs may grow
- Chairs may expand to include sub-committees

- Paid staff may be brought in to play both high level (i.e.—executive director) and lower level (administrative or support staff) roles

More info on leadership roles can be found in the core team part of the Membership section here: http://www.w3.org/2005/Incubator/owea/wiki/Membership_White_Paper#Core_team

CHAIRS

Initial Chairs to consider (working list, include descriptions too):

- Communications
- Partnership
- Membership
- Resources
- Events

The project Chair

- Every initiative should belong to a Chair
- Chairs should not do everything! - This is easy to say and hard to do in young or small organizations. To prevent this, chairs should be reminded that doing everything:
 - Contributes to an exclusive organization
 - Causes burnout
 - Negatively impacts succession planning due to lack of opportunities for others
 - Detracts from big a picture focus

STRATEGIC INITIATIVES

Each strategic initiative should facilitate the achievement of specific goals and/or support our organization's mission and vision. Consideration should be paid to developing an official process by which initiatives are created and measured.

PARTNERSHIP

Partnerships are regarded in the context of establishing relationships with 3rd parties that can benefit our cause. Although funds can be derived from partnerships, there are many ways that partnerships can benefit the organization.

CHARACTERISTICS

What partnerships mean within our organization:

- They will play a critical role in the success of our organization
- They can take many forms and we will need to work towards defining the types of partnerships we wish to pursue
- They may employ negotiated or defined agreements and involve the exchange of money and/or support
- They reflect upon the organization and should never be taken lightly
- Allow us to accomplish things more quickly and effectively than we could alone
- Exist to benefit our organization financially and/or strategically

FUNDING

Many non-profits feel uncomfortable talking about revenues and profits. OWEA should not be one of those. We should remind ourselves that we can generally operate more effectively and/or achieve our goals faster and better if we are well funded.

There is a difference between trying to make money on something which requires great effort (i.e. - produce a book or event) so that the funds can be used to benefit the organization vs. trying to satisfy shareholders or business owners through the accumulation of profits, which is the traditional perspective of meaning.

Potential Sources of Funding

- Accreditation (long term / hard issue)
- Accept sponsorships (would vendor neutrality be an issue if we operate within W3C?)
- Partnerships
- Grant funding / Government funding (establish in Europe & USA)
- Book revenue / licensing of IP (free for non-profit, licensing for for-profit targets)
 - Print-on-demand course materials
- Events & conferences
 - WE Rock Events
 - WE Rock Conferences
- Consultancy on IP-Free content
 - Implementation consulting
- Membership

- Schools
- Businesses
- Individual membership/supporters
 - Teachers
 - Small businesses
 - Students

RECOMMENDATIONS

STRUCTURE

The following is a broad list of ideas to consider for implementation:

- Participation Agreements—It is recommended that all who are involved in participatory role within the organization sign a written agreement acknowledging their stated role and duration of commitment.
- Published Organization Chart—a clear breakdown of the organization’s structure should be accessible to all.
- Published Roles/Job Description—drawn from the written agreements signed by the executive board and each participant, this information is made available to all for better understanding of how each role functions
- Decision making path—Consider providing details on how requests or suggestions are made and how they graduate into commitments or initiatives.
- Succession planning—a generally acknowledged path for advancement eliminates confusion, avoids conflict and sets a standard for the expectation of how leadership changes

STRATEGIC INITIATIVES

- Create or adopt no new initiative without making sure it first has an owner (a chair), stated goals and has undergone an evaluation of the challenges and opportunities that pursuit will bring to the organization.

PARTNERSHIP

The following should be considered:

- A partnership chair should be established to support the evaluation and pursuit as well as the maintenance of

- We need to clearly articulate what types of partnerships the organization seeks to establish and promote that publicly

FUNDING

- Our business model should focus on a self-funding approach that provides a recurring revenue stream
- Our revenues can be enhanced through contributions, grants and other discretionary sources of funding but should strive to not be dependent upon them or we lose control of our destiny
- Bookkeeping and/or financial performance should be transparent to ensure ethical behavior and transparency
- An annual budget should be established which shall inform the extent to which we pursue various initiatives, influence pricing for revenue generating efforts and generally affect the overall financial behavior of our organization

Model Programs

Model programs are proposed both within the United States educational system as well as others, for example, in Sweden. Within the U.S. system, we focus on high school (secondary) and post-secondary (community colleges and universities). Many community colleges work directly with business and industry in their locale to provide graduates who can work productively in those businesses after they have completed a 2 year Associates degree or certificate program. Some graduates proceed to a 4 year university where they expand upon the technical and business skills they learned at the community college.

From our perspective, a model program is one which embraces the concepts of web standards, uses parts of an approved curricula and makes a concerted effort to keep the course content current and relevant to the needs of business and industry.

Community College Model Program

ABOUT ILLINOIS CENTRAL COLLEGE (ICC)

Illinois Central College, the area's community college, offers more than 2,100 courses each semester and serves more than 13,000 students each year. The college has four locations: the East Peoria campus located at 1 College Drive; the downtown campus on Adams Street; the north campus located at 5407 North University (Peoria); and the south campus located in Pekin, Illinois.

More than 250 programs of study are available. These include transfer programs, which provide students with the coursework for the first two years of a baccalaureate degree, and occupational and technical degrees and certificates, which prepare students in such areas as criminal justice, health care, automotive technology, culinary arts, therapeutic massage and information technology.

The college also provides a wide array of professional development and continuing education courses through its Professional Development Institute and a number of cultural programs through the Performing Arts Center.

HISTORICAL CONTEXT OF THE WEB CURRICULUM AT ICC

ICC offers an Associates Degree in Web Systems (we believe ICC was the first accredited degree - 1999). ICC has been teaching web standards since the inception of the program (although the term web standards was not widely used until the publication of Jeffrey Zeldman's book in 2002). ICC also offers 5 certificates (web designer, web developer, webmaster, eCommerce, and rich Internet application developer). The latter certificate was approved a full year before the term AJAX was coined (and we believe was the first accredited certificate in rich Internet applications). There are 17 separate courses taught at ICC covering numerous aspects of web systems and the associated business aspects. ICC has been recognized as a Web Professional Academy (recognized by the World Organization of Webmasters). This means the courses have been subjected to a rigorous review by outside entities with respect to many aspects (including web standards).

PILOT PROGRAM GOALS

Since the ICC program has already incorporated the necessary depth and breadth of course offerings for a comprehensive educational model at the community college level, our goal is to incorporate parts of various curricula in selected courses. This should assist our students who desire to articulate to four year institutions.

Why would ICC want to incorporate diverse materials:

- Existing ICC curricula are already developed and meet established industry standards,
- Our instructors will not have to spend as much energy keeping the content up to date (since some of this will be done by the authors of the OWEA curriculum, WOW Web Professional Academy member feedback, and others),
- Our existing program materials are independently validated since much of the OWEA curriculum seems to be easily included with little modification to existing lessons and modules, and
- Our business and industry partners will continue to be exposed to educational activities outside the central Illinois region (both from a WOW perspective as well as an OWEA perspective).

INCLUSION OF INTERACT CURRICULUM

ICC has presently incorporated the InterACT curriculum into the existing web accessibility and usability class materials (CMWEB 150). The instructor (Mark DuBois) was one of the reviewers of that InterACT course and the materials dovetail with what was already included in that course. He is asking current students to provide meaningful feedback as to these curriculum additions to develop a case study at the conclusion of the current (Fall, 2009) semester.

InterACT curriculum materials are being incorporated into the CMWEB 220 class (Web site Development with CSS) and the CMWEB 200 class (JavaScript for Developers). Although no lesson plans have yet been contributed to the InterACT curriculum in these areas, many of the concepts and resources dovetail into the existing classes with minor modification.

We offer the following initial course map to demonstrate what materials are being incorporated into which courses in the Fall, 2009 semester.

- ICC CMWEB 150 (Web Accessibility and Usability) - incorporates InterACT FED 130 (Accessibility) materials and some FED 300 (Findability) materials
- ICC CMWEB 200 (JavaScript for Developers) - incorporates InterACT FED 200 (DOM Scripting 1)
- ICC CMWEB 220 (Web Site Development with CSS) - incorporates Inter ActT FED 110 (Web Design 2)

SUMMARY

Preparing web professionals today is complicated (the requisite depth and breadth continues to expand). Necessary skills vary significantly from web designer to web server administrator to web security specialist to eCommerce and beyond. This is why ICC offers multiple certificates and 17 separate courses. Where possible we are using OWEA curricula to review our offerings and identify any missing components. Part of this review should also help identify gaps in existing OWEA materials. Because of our long history of teaching aspiring web professionals, changes to existing courses are relatively minor. This helps confirm that we have been on the right track for some time. We will continue to incorporate materials from a variety of resources to provide our students as much competitive advantage as possible. We anticipate that the OWEA resources will continue to incorporate resources from WaSP, WOW, the W3C and others.

Assuming these materials are successfully integrated into the above courses, ICC will consider the review to include other courses. These would include the CMWEB 110 introductory course (XHTML and Advanced Internet) (with InterACT F 100 Internet Fundamentals) and the CMWEB 120 (Creating Web Pages) (with InterACT FED 100 Web Design 1) courses. As the OWEA curriculum expands, other courses would be reviewed.

High school model

ABOUT THE INSTITUTION

Damascus High School is located in the suburban community of Damascus, MD, USA which lies approximately an hour from both Washington, DC and Baltimore, MD. As a public institution it serves approximately 1,420 students and growing. The diverse community represents approximately 8.3% African American, 5.1% Asian, 11.9% Hispanic, and 74.3% Caucasian. Over 76% of the student population is in Honors or Advanced Placement (AP) courses. The school consistently ranks in the top 25th percentile within its district (Montgomery County Public Schools) in standardized testing. Use these resources for more information on Adequate Yearly Progress (AYP), High School Assessment (HSA) Data, or School Demographics.

Damascus HS is a member of the National Academy Foundation (NAF) (<http://naf.org>) which allows Damascus to offer an Academy of Information Technology (AOIT). The AOIT Academy at DHS is a small learning community offering students three track choices: Computer Maintenance, Web Design, or Programming. A track allows students to enroll in a four year program of study in their track of choice. Each school year the students take a single course which either builds knowledge or builds upon prior knowledge. Students apply to the AOIT Academy as freshman and, pending acceptance, choose their program of study.

The DHS AOIT Web Design Track offers four courses that introduce students to the career of Web Design and Development and prepares them to excel as college students or young professionals entering the workforce. Those courses are Website Development, Advanced Web Tools and Digital Media, Database Administration, a paid internship, and culminated with an on-site college course in Computer Technologies. These courses are required for AOIT Web Track students but also open to enrollment by any student from the common population. By completing this four year program the students earn the following:

- Recognition during graduation
- College Credits from a local community college, Montgomery College (The exact amount of credits depends upon the exact path and specific courses taken. This can range from 3 credits to as much as 18 credits.)
- Good standing with a community institution having worked over 120 hours of paid time apprenticing technology skills

The DHS AOIT Web Design Track is also a World Organization of Webmasters Affiliate Institution.

PILOT PROGRAM GOALS

The Damascus High School AOIT Academy Web Design Track maintains these goals:

- Properly prepare students as young web professionals utilizing technologies and standards that reflect the industry
- Connect the professional community to the classroom to enhance students knowledge of professions and job skills within the field
- Instructors maintain constant growth as industry professionals and industry facilitators

INCLUSION OF INTERACT CURRICULUM

The program at DHS currently incorporates the following courses from the InterACT Curriculum:

- WI-F100 Internet Fundamentals
- WI-FED100 Web Design 1
- WI-FED110 Web Design 2
- WI-FED130 Accessibility
- WI-FED200 DOM Scripting 1
- WI-FED300 Findability
- WI-D100 Digital Design Production
- WI-PP200 Internship

Materials from these courses are included in the following DHS AOIT Web Track courses: Website Development, Advanced Web Tools and Digital Media, and the paid Internship. Similarly, portions of the Opera Web Standards Curriculum are included in these courses, whether directly or indirectly.

Future Plans

The DHS AOIT Academy is looking to expand and enhance its program. Through various advertising venues Academy officials wish to increase student enrollment. If possible, future courses that would be beneficial to the preparatory program of young web professionals will be included as materials expand in the above cited resources. The program will continue to forge stronger connections with local web professionals by bringing in guest speakers and offering field trips.

The program is working to formalize a mentorship program that would connect a single student to a single web professional for the duration of each course. The web professional would be encouraged to offer feedback and advice on classroom assignments to the students. Ideally, this would culminate with a on-site job shadow session.

With growing support and awareness for web design education through the work of OWEA, WaSP, WOW, and the W3C, the DHS AOIT Web Design Track hopes to continually enhance its program in order to create more highly qualified web professionals.

University model

THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA

The University of Tennessee at Chattanooga (UTC) is a viable institution to have an OWEA pilot program. UTC's vision, mission, and core values align well with OWEA's mission. With proper regional and global support UTC would be positioned well to have a pilot program that supports OWEA's initiative and values.

UTC had been a private institution for 83 years when it joined the University of Tennessee's system of statewide campuses. UTC retains the best aspects of that private tradition, yet offers all the resources of a modern public university. Since its founding as Chattanooga University in 1886, The University of Tennessee at Chattanooga has developed an institutional excellence which rests on an unusual blend of the private and public traditions of American education.

Located near downtown Chattanooga, The University of Tennessee at Chattanooga is one of a growing number of institutions characterizing themselves as "metropolitan universities." The metropolitan university mission includes a dedication to meeting the general and professional educational needs of area residents, strong community involvement and leadership, and emphasizes on applied research and public service.

People appreciate UTC not only because of the excellent facilities, but because of its beauty, the trees, flowers, and architecture. And, most of all, the genuinely nice people.

UTC has approximately 840 faculty members who serve over 10,500 students from every state in the US and from countries from Australia to Zambia. UTC offers approximately 143 Baccalaureate degree programs, 50 minors, and 72 Graduate degree programs.

VISION

The University of Tennessee at Chattanooga is recognized as a premiere metropolitan university, known for its outstanding undergraduate and graduate academic programs, scholarly and creative achievements, diversity and inclusiveness, and critical partnerships that take advantage of our setting to provide solutions to global concerns.

MISSION

The University of Tennessee at Chattanooga is an engaged, metropolitan university committed to excellence in teaching, research, and service, and dedicated to meeting the diverse needs of the region through strategic partnerships and community involvement.

CORE VALUES

In fulfilling our mission, we are committed to our core values:

Preparing for the Future

- The development of ethical and socially responsible leaders, professionals, scholars, and citizens
- The creation of opportunities for those who seek truth, knowledge, and higher quality of life

Education and Engagement

- Excellence in teaching within a student-focused, supportive, and challenging environment
- Achievement and national recognition in research, scholarship, and creative endeavors
- Effective partnerships that provide meaningful involvement in educational, economic, and community development

Positive Institutional Environment

- A collegial, mutually respectful, and professionally rewarding environment
- Broad diversity of people and ideas to strengthen our institution and community
- Reasonable and affordable access to quality higher education

PILOT PROGRAM GOALS

Our goal is to develop a comprehensive educational model that provides a holistic method to teach web media education.

This model will enable:

- Instructors to remain vital industry professionals, thus allowing them to be current with trends and technologies,

- Maintenance and enhancement of relationships between education and industry, and
- Students to learn and practice relevant skills and technologies in the fields of web design and web development.

INCLUSION OF INTERACT CURRICULUM

The University of Tennessee was the first University to adopt aspects of the InterACT curriculum. UTC currently incorporates aspects of the following InterACT courses within their curriculum:

- Internet Fundamentals
- Web Design 1
- Web Design 2
- Accessibility
- Digital Design Production
- Internship
- Independent Study
- Professional Development

Aspects of these courses have been included in UTC courses such as: Visual Literacy of Graphic Design, Web Media I, Web Media II, Professional Practices of Graphic Design, Independent Study, Internship, and Processes and Materials of Graphic Design.

FUTURE PLANS

As the InterACT curriculum continues to expand to include new courses, new assignments, and other curricula like the Web Standards Curriculum and Juku, we will continue to incorporate these materials into our courses. The ultimate goal is to have a full-fledged pilot program at UTC. This will depend on strengthening relationships between the University and industry and having a commitment of support and resources from industry. With financial, equipment, and personnel support UTC will be positioned to have a pilot program that supports OWEA's goals and to more comprehensively assess the InterACT curriculum.

OWEA Outreach

INTRODUCTION

A coordinated outreach and communications plan is required to make all interested parties aware of the OWEA’s mission, and the resources it will make available. This plan is focused on the following areas:

- Audience: The target audience groups we intend to reach
- Method: The methods of outreach required to reach our target audience
- Message: Key messages to communicate to our target audience
- Feedback: Feedback mechanisms required to address response from our target audience

AUDIENCE

Although the direct implementation of curriculum is largely centered around educational institutions, the target audience for OWEA outreach covers many more groups that will all help contribute to both greater awareness of the OWEA in general, and wider visibility of the curriculum and web standards in general. These target audiences are broken down as follows.

EDUCATORS

Educator subgroup	Description
University	Educators teaching at university
College	Educators teaching at colleges
School	Educators teaching at secondary schools— high school down to primary school (younger children?)

SCHOOL AND UNIVERSITY ADMINISTRATORS

Individuals who make business decisions at educational institutions require clear justification of their budgetary allocations, and straightforward messages and value propositions that articulate the benefits of adopting OWEA curriculum.

BUSINESSES AND CLIENTS

Businesses must be addressed differently from educators—their needs are to clearly understand how (and by what criteria) to hire qualified professionals, how to interface with a web professional to develop their web presence and brand, and what web standards represent in terms of competitive and functional advantages to business.

Business subgroup	Description
Managers	Those who make the decisions to hire new staff or contractors
HR	Those in the business responsible for the hiring process
Finance	Those in the business who manage operating budgets

STUDENTS AND PARENTS

Students are of primary importance, to both build comprehensive skills with which to create web sites and applications, and develop their passion towards web standards in general. Students often perform their own ‘viral’ outreach work towards other students, teachers, and their local community, which is especially important for universities and schools that are not teaching best practices and/or are resistant to change.

Parents are a secondary concern, but it is important for parents to be assured that their children are following a solid professional skill development path. Parents can also be very good student motivators, with influence in their own communities and their children’s schools. Parent-Teacher associations are another strong target audience for OWEA outreach.

TRAINERS

Trainer subgroup	Description
Professional Trainer	Holds private training sessions attended by corporate teams and individuals
In-house trainer	Holds training sessions for fellow employees

HOBBYIST/SELF-TAUGHT

Many current web professionals either learned web standards and best practices through personal exploration and self-development, or as a side hobby that grew into a career over time. Due to the accessibility of open web technologies, this is a natural and expected path for many to enter the web design and development world, and requires outreach to help assure that they are focusing their attention in the right areas, and on the right end goals.

GOVERNMENT

Similar to business audiences, government needs to have clear goals and skillsets for hiring qualified web professionals. Additionally, a clear understanding of the efficiency of developing to web standards and how this will address accessibility, legislative and usability concerns is critical to ensuring that best practices are proliferated across departments and functional groups.

PUBLIC/MEDIA

Communicating to both the media and the wider public at large will use similar mediums (press releases, blogging, social media, etc) and consistent, global messaging and positioning speaking across all of these audiences.

WEB PROFESSIONALS

Web Professional subgroup	Description
Web professional (standards-aware)	These individuals already live and breathe web standards, and are more likely to evangelize and advise on content, rather than learning directly from it.
Web professional (would like to learn more)	Will learn great deal from our curriculum, given the opportunity. Some web developers who don't leverage web standards may care, but can be shackled by their employer's existing sites and infrastructure.
Web professional (uninterested)	Admittedly, these individuals don't see value in learning a new skillset to achieve tasks they can already accomplish. This type of attitude is very hard to change.

METHOD

This section documents identified methods of communications and their relative importance based on several criteria:

- Important: Is this activity specifically relevant to our cause?
- Easy: How costly is this activity in terms of time, cost and effort?
- Effective: Is this activity effective in reaching our target audiences?

Outreach activity	Description	Important?	Easy?	Effective?
Internship/recruitment program	Very important activity to help bridge the gap between education and industry - get both sides talking on a regular basis. Very effective and could also be easy to pull off if we deal with it through local advocates	yes	yes	yes
Guest Lectures	Lectures/events at universities, schools, companies, and conferences. High potential for recording and reuse.			yes
External interviews/case studies	Interviews with prominent educators, students and industry figures showcasing their efforts and the importance of web standards.		yes	

Outreach activity	Description	Important?	Easy?	Effective?
Articles	Not the education learning articles, but articles in online magazines and newspapers to highlight our cause and advertise events		yes	yes
Press Packs	Distributable OWEA press pack, consisting of articles, mission statement, sample curriculum and swag.	yes		yes
OWEA Member Profiles	Interviews with OWEA members, showcasing their work and giving tips on education, success stories, etc.		yes	yes
Contests	Contests to get students passionate about doing cool things with web standards. WOW already organizes such contests.			yes
Blogs	Establish an official OWEA blog for direct messaging, and highlight blogs published by OWEA members and key voices in the education community.		yes	
Twitter	Incredibly effective for 'real-time' OWEA updates and messaging to the wider online community, especially around physical and online events.	yes	yes	
WE Rock Self-Tour Kit	Instructional package teaching others how to run their own standards outreach advocacy days, in a barcamp style.	yes		yes
Advocacy Rewards	Offer students recognition and rewards for becoming local OWEA promoters and community advocates.			
Liaisons and Partnerships	Secure key contacts in government, accreditation bodies, trainers and agencies.	yes		yes
"Train the Trainers"	Create materials to educate teachers how to best teach web development.	yes		
Testimonials	Quick soundbites and testimonials from educators and industry, to display on our site and improve confidence in our resources		yes	
E-mail Campaigns/ Updates	Newsletter and/or email updates—very effective at direct, targeted messaging to opted-in parties.		yes	
Forum	Online forums for direct interaction with the education community. Currently available on the InterACT web site: http://interact.webstandards.org		yes	
Viral videos/ comic strips	Humorous takes on relevant topics, distributed virally via social media and community interaction. Very effective if done right.			yes

Outreach activity	Description	Important?	Easy?	Effective?
eSeminars	Hold online seminars to highlight, evangelize and explore the OWEA curriculum.			
Podcasts				
Endorsements/ seals of approval	Create an official endorsement/stamp of approval to give to educators acknowledging their OWEA-derived courses.			
University and college open days	Presence at larger collegiate full-day sessions, workshops and career day events.			

MESSAGE

A list of key suggested message topics follows, with bold entries ones we feel are globally-important messages to spread to all of our target audience groups, so also represent the recommended focus for our initial wave of outreach. The list in its entirety represents broad topical approaches to be considered as a longer-term messaging framework is established and progress is made on the core OWEA curriculum and adoption.

A short-term goal will be creating a matrixed messaging framework, outlining message topics specifically relevant to each identified target audience group.

Creating Well-Rounded Students	Employability
The OWEA Curriculum	Accreditation
Engagement	Problem solving
Life-Long Learning	Ubiquity/Omnipresence
Translating standards to 'the everyman'	New Strategies for Delivering Curriculum
Internationalization	What's Exciting about Web Tech
Differentiation	Increasing Income/Endowments
Increasing Enrollment	Increased Success Rate/Metrics
Community and the Web Ecosystem	Improving The Bottom Line
Creating Bonds Between	
Industry and Education	What's Required to be a Web Professional
Relevance of Skillsets	Future-Proof Skills
Building OWEA Awareness	Professional Development/Retraining
Web Stewardship	Legislation/Legal Risks
Demystification and Personal Relevance	Information Accuracy
Build Respect For Our Craft	

FEEDBACK

Initially, we should:

- Create short-term messaging plan and begin using social media (Twitter, blogs, etc) to both raise awareness of OWEA and solicit new leads and volunteers.
- Create feedback mechanisms as appropriate to collect and assess community input and suggestions.
- Evangelize to immediate educational contacts about OWEA and what we are doing with it. Ask them how useful it sounds to them, and what curriculum they would like to see.
- Start pinging educators at universities/colleges/schools and ask them what kind of web development teaching they have, and how OWEA could be useful to them.

Then later on:

- Create press strategy for larger-scale messaging and time with curriculum development milestones.
- Ask our immediate educational contacts for feedback on the existing structure and revise as needed.
- Solicit contacts and community for developing wider sets of resources and links to OWEA-derived (and relevant) content.

SAMPLE OUTREACH ACTIVITIES

This section lists a sample outreach activity that we hope to start with. This can be used as a template for any further outreach activities.

UNIVERSITY STUDENTS AND LECTURERS

These two groups are listed together as a single item as contacting students and their teachers should ideally be done in tandem. Similar mechanisms will be used to contact each group, their goals being much the same (acquire, or teach skills needed to get a job). The outreach program spec will look something like this:

- Name of outreach activity: University outreach
- Target groups for outreach: Primary targets University students and University lecturers. Secondary targets Parents and University administrators. Activity can be run in multiple territories, depending on how many personnel we have available.
- Personnel required: For each territory and each project cycle, we need a project leader to manage the project and do part of the work, we need two to three admins to do tasks such as sending out e-mails, writing

promotional copy and logistics, and we need a few presenters to agree to do face to face meetings/guest lectures/open days

- Activity cycle: Each round of the project to run for one year, in each territory
- Goals and Success criteria (per territory, per year):
 - Get 15 universities to adopt and promote OWEA-approved resources as further reading and recommended texts on their web-related courses
 - Organise 10 WE Rock events at universities/local businesses
 - Get 3 universities to start teaching a OWEA-approved degree course on web design/development, or at least improve what they currently have significantly
 - Get 10 students and 5 industry professionals to act as local evangelists, helping to promote web standards education in their local area
 - Forge 5 links between universities and several local web development companies so the companies can provide advice, sample questions and suchlike, and the universities can provide students for internships
 - Get 10 universities to improve their web sites so they follow web standards and best practices
 - Get 10 universities to roll out a choice of standards-compliant browsers on their networks (many university networks are still stuck on IE 6/IE 7)
- Outreach methods to employ:
 - E-mail/twitter/phone/message boards for contact and outreach
 - Guest lectures
 - WE Rock tour/tour kit
 - Press packs
 - Advocate packs/rewards
 - Train the trainers
 - Internship/recruitment program
 - Press interviews - TV, radio, online, newspaper
 - Testimonials
- Basic message abstract: One major goal of any university is to teach students the skills they need to get a job in their area of specialisation. In the field of web design and development this often does not happen successfully; many universities do not teach web development skills that are compliant with best practices, hence there is a shortage of skilled graduates coming into the web industry. There are many reasons for this, and it is not just the fault of the educators or the industry. We would like to help you make your web-related courses the best they can be. We are a group of web industry and education professionals, and can offer you all the materials you need to run a complete web design program, and offer a flawless set of web resources.

Our resources provide all your students could ever need for background reading and learning materials. We also offer other services such as hooking you up with local companies for internships and offering guest lectures. We'd love to organise a meeting with you to talk about what we can offer your university.

- Plan of action for carrying out this outreach
 1. Choose territories to carry out the outreach activity in. Territories should be of a sensible size to manage for a small team, for example the UK, East Ukraine, or Atlanta.
 2. Put together a team to carry out the outreach activity for each territory Research universities and local web companies to be involved in the outreach. About 30-50 of each would be a good number to start with. This should be done in about 2 weeks. Of course, if you already have lecturer or student representatives from those universities, that makes things easier.
 3. Contact each one of these with an appropriate introductory mail or phone call that is polite, concise, and to the point. Try to make your point of contact as appropriate as possible, e.g., the head of the computer science or interactive media faculty, or the creative director of a company. This should be done in about one month.
 4. When each one gets back to you, give them more information and try to arrange a meeting, online or face to face. Also ask them for details of local student representatives or employees that might want to act as local evangelists.
 5. For the ones that don't reply, try them up to a maximum of three times, perhaps employing different tactics each time. If they still don't get back, give up and move on.
 6. When you have about 15 universities interested in hosting WE Rock events promoting best practices, take the next steps to get the resources into their courses, and sort out the logistics for the events***
 7. When you have about 15 local companies interested in acting as advisors or internship places, take the next steps to forge the links with local universities.
 8. When you have about 10 students and 10 industry professionals interested in local evangelism, go through what it takes, and roll out evangelism packs.
 9. When organizing the WE Rock events, don't just invite people from those universities, invite people from all surrounding universities, companies, and schools. Invite local politicians and media. Make a big deal out of it, sell it to the university as getting them more publicity, as well as raising the profile of OWEA.

10. Talk to the universities about getting better browsers into their labs, and and improving their web sites. Offer them free consultancy advice.
11. After the events are over, keep in contact with the universities, to encourage and support them to keep up the good work. Collect testimonials/quotes, etc. to use for future outreach/marketing activities.

Summary & Conclusion

Since beginning its current term as a W3C Incubator Group, the Open Web Education Alliance has been focused on solidifying its vision and strategic initiatives. This whitepaper documents a proposal for the shape of an organization.

In order to establish a new field of study in Web Craft and fulfill the vision to cultivate symbiotic relationships between industry, research and education, OWEA will focus on the following initiatives in 2009-2010:

- Web Education as new W3C Activity: Establish the Open Web Education Alliance as a sustainable W3C Activity that engages practitioners, educators and researchers while simultaneously furthering the potential of the Web and society.
- Web Craft pilot programs: Support faculty in developing a model Web Craft program in at least one university, one community college and one high school.
- Open Web Education Curriculum: Adopt suitable teaching resources (such as the InterACT Curriculum Framework, Opera Web standards curriculum, etc.) and create a course content policy to facilitate its evolution to meet the needs of educators, industry and the open Web.
- Outreach Activities: Create a coordinated outreach and communications plan to target educators, school and university administrators, businesses and clients, students and parents, trainers, Web professionals, government, media and the wider public.

WEB EDUCATION AS A NEW W3C ACTIVITY

After exploring several options, including operating as a for-profit or non-profit corporation, it is apparent the most desirable option is to establish OWEA as a formal part of the W3C.

The scope of OWEA's work can be complementary to the W3C's current focus and there are benefits to both parties. This presents an opportunity for the W3C to increase its membership and further relationships with educational institutions in a capacity other than research and development. The creation of a School of Web will also promote the use of and expand the acceptance of Web standards, helping speed adoption and likely increase uptake of new standards as the students of such a program go to work for more and more implementers throughout the industry. The W3C stands to gain a clearer per-

spective from the broader educational community: the teachability of current and proposed standards. As an Activity of the W3C, the Web education effort would foster a “feedback loop” for educators to provide much needed commentary on how teachable proposed specifications are, providing a preview of how clear the specification is, and whether it is likely to be taught and thereby used in the real world.

In turn, OWEA can benefit from W3C’s flexibility in the way specific activities are organized and managed, in order to fulfill its own plan for funding models, sustainability and resourcing. We have recognized that in order to create a strong and lasting impact, OWEA must be structured in a manner that facilitates the ease of operation, fosters growth, and accommodates changes in leadership while operating efficiently based on sound financial planning. As part of establishing OWEA as an organization, we have begun exploring business/funding models as well as options for a sustainable organizational structure. Other work that we are currently undertaking includes establishing policies for course content and intellectual property, the latter of which we would inherit if established under the W3C umbrella.

We feel that the relationship between OWEA and W3C would be one of mutual benefit and are confident that it will strengthen the Web as a whole. By creating a new Activity for Web Education, the W3C will continue to take an active role in improving the Web as it currently exists and in shaping the Web of the future.

WEB DEVELOPMENT AND WEB CRAFT PILOT PROGRAM

A higher standard in Web development education and best practices lays groundwork for both the craft of Web development and for the science of Web progress. Students with a more comprehensive and systematic understanding of all aspects of Web development, from client and server-side programming, to semantic and accessible markup, to Web architecture and protocols, to design (including aesthetics, user interface, and user experience), will be better prepared to improve the quality of Web content, and ultimately to continue on to more advanced topics in Web Craft.

OWEA members have already begun to work on integrating pilot programs at:

- Illinois Central College
- Damascus High School
- University of Tennessee at Chattanooga

These pilot programs incorporate aspects of the WaSP InterACT curriculum and Opera Web standards curriculum, and they will expand to include other

material if proven successful. The pilot programs will help identify gaps in existing OWEA curricula, and highlight needs that require future development.

At the time of writing, there is a potential for WaSP InterACT material to become a basis for Web-Science related curricula in Sweden as part of the reform of its school system.

OPEN WEB EDUCATION CURRICULUM

Our mission to help enhance and standardize the architecture of the World Wide Web by promoting Web standards and industry best practices in education centers upon the evaluation and development of curricula materials. As such, OWEA must have clear policies regarding course materials, and strategies to either create pedagogical materials or evaluate and recommend them. OWEA must also work with the community to ensure that these materials are freely available for universal access to disparate audiences: that they are available under an open license, that they are available in multiple languages, and that they are available in accessible formats (such as offering transcripts for any audio or video content).

We favoured adopting and expanding upon an existing curriculum like WaSP InterACT because it already has a framework for content development and contributions of courses, assignments, and learning modules, making it strong option for OWEA to use as a foundation to build upon. The WaSP InterACT curriculum (<http://interact.webstandards.org>), Opera Web Standards Curriculum (<http://opera.com/wsc/>), and select content from the Yahoo Juku training program are already being combined. Adobe has also created a wealth of valuable educational material that could be integrated into this curriculum.

We are working on a course content policy that ensures OWEA curricula are based on Web standards and best practices, are practical teaching tools, and relate to the needs of industry as it evolves with the changing face of Web technology.

OUTREACH ACTIVITIES

To ensure all interested parties are aware of OWEA's mission, a coordinated outreach and communications plan is being developed.

The plan will focus on:

- Audience: The target audience groups we intend to reach
- Method: The methods of outreach required to reach our target audience
- Message: Key messages to communicate to our target audience

- Feedback: Feedback mechanisms required to address response from our target audience

CONCLUSION

OWEA is committed to furthering web education through the following goals:

- Facilitate the creation a Web Craft Degree. We will support faculty in universities, community colleges and high schools to establish a new comprehensive field of study in the Web Crafts.
- Foster Web Craft Curriculum. We will nurture a living curriculum frame work that emphasizes best practice and open Web standards, adaptable to the needs of universities, community colleges and high schools.
- Evolve a Sustainable Web Ecosystem. We are a forum where the evolving needs of education, research and industry meet to further the Web.
- Encourage usable and practical web standards We provide a channel for Web Craft educators to give valuable feedback on how to make Web standards as teachable, learnable and intuitive as possible. Concurrently, industry and practitioners advocate for Web standards that are feasible.
- Establish Web Career Pathways - We clarify definitions of roles and competencies of the Web profession, so that individuals understand how to enter, successfully develop and navigate within the Web profession. By defining career pathways that correspond to the living curriculum, we ensure that we are continually meeting the needs of education, research and industry.

OWEA in Action

White papers are useful when they clearly illustrate a vision and motivate people to turn ideas into reality. The members of the Open Web Education Alliance are actively working to better the web. Here is a list of activities that contribute to the cause. We note them not to rest on them, but to be motivated to keep moving forward.

Action/Event	Details	Date	Focus Area
InterACT Book Donation		2010Apr	Alliances
InterACT Web Curriculum—2nd Release	SXSWi, Austin, Texas	2010Mar	Curriculum
Environments for Humans Donation		2010Jan	Alliances
Google, Microsoft, Yahoo join OWEA	W3C	2009	Alliances
Web Education Rocks!	Sydney, Australia	2009Oct	Outreach
Web Education Rocks! WE Rock Summit	Chattanooga, Tennessee	2009Aug	Outreach
OWEA Incubator Group begins at W3C	Sponsored by Adobe Systems Inc.; Mitsue-Links Co., Ltd; and Opera Software.	2009Apr	Alliances
InterACT Web Curriculum—1st Release	SXSWi, Austin, Texas	2009Mar	Curriculum
Ed Directions North	Web Directions North, Denver, Colorado	2009/Feb	Outreach

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To get more details/Join the cause

<http://www.w3.org/2005/Incubator/owea/>