

CHAPTER IV

DISSEMINATION

The relationship between the developer and publisher is a crucial link in the chain from development to implementation and use. In many projects, developers and publishers shared a vision, resulting in published materials that matched the intention of the developers. However, in others, differences between the two led to changes in the product and deviation from the original goals. Such deviation, when it occurred, led to problems related to adoption, implementation, and use.

As materials move from developer to publisher, they are considered in the context of the market. If a market for reform-oriented materials exists, mainstream or other commercial publishers would use their resources to support dissemination because the materials could be profitable. However, the major barrier faced was the perceived absence of a market for reform-oriented materials.

Most developers did not systematically identify an appropriate market before proceeding with development of materials. Except for those developing extensions of earlier materials, developers were more concerned with creating innovative materials than with their eventual use:

“We were not trying to produce a curriculum that was market driven. Instead, we reviewed current middle school curriculums and tried to produce an innovative curriculum where one did not exist.” (*Developer Interview, Project 11*).

Both developers and publishers repeatedly spoke of a reform-oriented market as comprising 20 to 30 percent of the total market, although no one was able to provide a reason for that number. However, the widespread belief that the market was small meant that few major publishers were interested in accepting the materials. Further, even those who published the IMD materials cited the need to build the market for reform before significant market penetration could be gained. In addition, although developers and publishers believed that professional development served an important function in disseminating the materials and acted upon that belief, publishers noted their own limited ability to provide the type of professional development required.

Marketing success largely built on positive relationships between developers and publishers. A further element in success was the activity of the developer in assisting marketing efforts.

This section begins with a look at developers’ perspectives on why large publishers seem reluctant to publish IMD-funded materials. The original intent of the study was to ask major publishers about their views of NSF-supported projects and the reasons they were either willing or unwilling to publish them. However, major publishers refused to take part in the study, so the voices reflected in this section are those of developers only.

The section then moves to a discussion of the relationships between developers and publishers, highlighting elements that support active dissemination and those that seem to be barriers to widespread use. The third part focuses on what developers and publishers called “building a market for reform” as essential to successful dissemination, adoption, and implementation of NSF-funded products. The section concludes with a look at the marketing strategies used and notes the importance of professional development as an approach to marketing, but also acknowledges the limitations in relying on publishers to provide that professional development.

Reluctance from Larger Publishers

There were a few projects where developers signed with larger publishers, either from the start, or after first working through a smaller publisher. However, to their chagrin, most developers discovered that the majority of the larger publishers were unwilling to publish the materials. The developers stated that major commercial publishers consider the reform market to be narrow and controversial and tended to shy away from carrying IMD products. Because those publishers would not talk with us, we can only report on the developers' perspective.

“We've been looking to get another publisher, but prospective purchasers are seeing the potential controversy. Also, other publishers typically have their own line, and they don't want to cannibalize those sales...We came to the realization that publishers are very reluctant to take on these new curricula and the expenses associated with them. Unless you find one, usually a smaller one, that's willing to take a risk, they're just not interested...The publishing industry has not been known for its innovations. If anything, they're known for the opposite.” (*Developer Interview, Project 15*).

Developers felt that getting a publisher is of critical importance, and that they were lucky to have found who they did. The PI emphasized that you have to get a good publisher, not just a publisher. Many publishers are so large that they don't pay any attention to those doing projects like this. The teacher/developer commented that she wasn't sure what would have happened to their project if they hadn't connected with the publisher. She's not sure they could have gotten the materials out. (*Summarized from Developer Interview, Project 6*).

“There is still a bottleneck in terms of problems in the publishing field. It is unrealistic to expect publishers to participate in killing their own cash cows. The standard textbook people are still a problem. The reason [our publisher] is amenable is because they see educational reform as their publishing niche.” (*Developer Interview, Project 2*).

“Most curriculum products are published by big publishing companies who can afford to give good deals to districts that buy large numbers of books. Big publishers are not willing to invest in new curricula, so new curricula are often published by small publishers who cannot afford to offer such deals. This makes dissemination of new products difficult.” (*Developer Interview, Project 19*).

One publisher in particular identified itself as focusing on the reform-oriented niche of the general market. Its focus has both positive and negative aspects for the IMD program. On the one hand, the editing and sales staff understand reform-oriented curriculum and can work closely with developers. On the other hand, the limited size of the market it pursues constrains the funds it can invest in dissemination and staff development.

Relationships Between Developers and Publishers

Effective partnerships between the developer and publisher were often characterized by a shared vision of the education reform agenda or shared knowledge of important content prin-

ciples embodied in the materials, which made the niche market publishers attractive to developers. In the best situations, developers and publishers took seriously the need to be full partners in promoting and disseminating the materials. On the developer side, this meant that from the outset, members of the team realized the importance of finding a publisher who felt comfortable in taking the risk to publish niche materials, understood the developer’s vision, and valued the need to provide professional development to potential adopters. On the publisher side, the best relationships were characterized by a strong commitment to professional development, understanding of the type of material with which they were working, and knowledge of the actual content.

In one successful partnership, the developers were savvy about their relationship with the publisher, in part because a member of the development team was familiar with marketing and the business aspects of publishing. The developers included contractual provisions related to their major concerns:

“...We were careful to write into the contract that we were to participate in all aspects of marketing and development. In fact, their sales staff had to be okayed by us...We wanted to build a relationship with the publishers and be partners all the way...” (*Developer Interview, Project 4*).

The publisher also understood the nature of the materials:

“It’s clear that this wasn’t competing against textbooks—we had to appeal to schools, districts, and states who were interested in looking at fresh approaches to improving science education for children. We were competing in a huge market but as an entirely new entity.” (*Publisher Interview, Project 4*).

In addition to the shared understanding between developer and publisher, successful dissemination of the materials built on the existence of earlier, related materials, which created an initial market.

Another successful partnership involved extensive efforts by the developer to build a support network before making the materials commercially available. Building the network was possible because the product was fairly well developed prior to receiving IMD funding. At the same time, the publisher’s staff spent time with the developers and members of the network so they could understand the materials.

The sales manager and vice president of marketing have gone through the training for the materials so they can understand at a deeper level how to represent the materials in the marketplace. (*Summarized from Publisher Interview, Project 5*).

Less effective developer-publisher relationships were often characterized by a gap in understanding between the two parties, which, at its most extreme contributed to a mismatch in goals. In such cases, developers were naive in selecting the publisher, and publishers did not understand the product, the developer’s vision for it, and the difference between the IMD-funded materials and more traditional curricula. The potential for conflict between developer and publisher is great because each brings its own perspective to the partnership. Although the developers would like the materials to be widely disseminated, their main goal is to have the materials implemented in the classroom to advance an approach that they deem important:

“...we don’t want people buying the materials for the wrong reasons... We felt it important to argue the integrity of the materials... Since they were into the money and we weren’t, we viewed [working closely with the publishers in marketing] as counterproductive to our purposes.” (*Developer Interview, Project 7*).

“NSF needs to keep encouraging innovation. The market will do nothing itself to encourage the development of better science curricula... Publishers do not care about producing innovative curricula but only textbooks, which can be sold for a profit.” (*Developer Interview, Project 26*).

“...because publishers are commercial, meaning that they have a focus on the bottom line, they’re really only willing to work with something that already has a market. A commercial enterprise doesn’t have lots of room to *create* a market. To expect publishers to deeply engage in something that steps outside of the current market is naive. They simply won’t invest huge amounts for something where there’s not yet a substantial market. Educators and publishers have different business practices and goals, and we’re totally at the mercy of the publisher and the business decisions they make. NSF used to worry about the product sitting on the shelves of the developer, but I tell you, I worry more about it sitting on the shelves of a publisher.” (*Developer Interview, Project 10*).

In some cases, developers experienced what they believed were “bad deals” with publishing houses:

No member of the development team knew if [the publisher] was offering professional development for teachers. One suspected that they did not, and if they did, [the publisher] was probably charging extra for it. He also contends that because [the publisher] has separate divisions for math, science, and technology, the logistics involved in [the publisher] conducting teaching development are likely to be difficult. The developers feel that the greatest lesson they learned was the difficulty in dealing with a major publisher. The developers have felt powerless in getting [the publisher] to respond to their concerns. [the publisher] has published only four modules, which developers feel has turned [the product] from a comprehensive curriculum to a supplemental one. The developers are upset because they cannot take their materials to another publisher because of the agreement they made with [the publisher]. (*Summarized from Developer Interview, Project 17*).

The developer said this was a different kind of curriculum—it was for teachers not students. It required a new mindset that publishers didn’t have. For example, publishers routinely give away copies of the Teacher’s Edition as a marketing come on. When they did that with [the product], they were giving away what they were trying to sell... The sales force is not motivated because it’s not that profitable selling books to teachers as opposed to selling books to students. There is one teacher to 30 students, so you sell one book when you could sell 30. (*Summarized from Developer Interview, Project 10*).

In other instances, the developers believed that the publishers were simply not ready for the

types of products that were being developed with IMD funding.

These are the most complicated materials that he has ever tried to market. There is no formula for selling them and no opportunity for rapid sales. People must be trained first. This will never be a runaway best seller. Sales will be slow and progressive, and there will only be an incremental increase in market share, with lots of work at each level. There are not structures in place to support rapid growth. As a result, this type of project is less profitable for them and more risky, particularly since they have not control over the professional development side. If NSF pulls its support for that, then they will basically lose their investment—that's the number one lesson he's learned. (*Summarized from Developer Interview, Project 5*).

According to the project developer, they wanted to find a publisher who was willing to market all three pieces....At that time, publishers were not touching software, and distributors of manipulatives tended not to market books. Some were willing to take on one piece, but not the rest. (*Summarized from Developer Interview, Project 6*).

Interview respondents frequently raised the issue of the size and nature of the market that might be expected to invest in reform-oriented materials, and the general estimate was that the market was between 20 and 30 percent of the total market. Most developers and publishers believed that was the market share for which they were competing. However, a few developers thought that the market size was underestimated, leading to weak approaches to dissemination:

“There doesn't seem to be any overall marketing strategy on the part of [the publisher]. Why? They underestimated the demand for these materials in spades. They've seen them as niche products because the school district has to be ready to stretch to do this over choosing a hardbound text. So they only printed 2,000 copies in the first run. But later on, at one time, they had \$2.5 million in back orders, and we don't know how many of these ever got filled....I don't know if the publishers even have a rep just for us...There's not much devoted attention to [the product]. Our stuff is far out compared to the hard cover stuff they carry, but the hard cover texts sell better.” (*Developer Interview, Project 19*).

While one of the developers is concerned that the “early adopters” have all bought the curriculum by now, the publisher disagrees. She says that [the product] had “gone beyond the cutting edge and that there are now large scale district adoptions taking place, winning people from [a mainstream publisher].” (*Summarized from Publisher Interview, Project 15*).

For the most part, the publisher's goal is to generate a profit.

“We can't force people to buy our materials, and sometimes I wonder if [the developers] realize that.” (*Publisher Interview, Project 21*).

The conflict between a developer and the commercial publisher they chose is illustrated by a problematic partnership. Features of the materials (Project 24) make it complicated for any

publisher to market because the project involves integrated curriculum, designed to promote inquiry-based and cooperative learning. The curriculum is activity- rather than textbook-driven. Given the complex nature of the materials, the selection of a commercial publisher with no experience with reform-oriented curricula led to clashes between the developer and the publisher. In marketing the materials, the publisher used techniques that had been successful with traditional materials. Although the materials were designed as a comprehensive set, the publisher turned them into supplementary modules, and only published some of them. The publisher justified the decision by arguing that cost factors would influence teachers to buy supplemental rather than the comprehensive set. In addition, the publisher promoted different modules according to the relevance of the materials for different regions. From the developer's perspective, the marketing approach contradicts the intention of the materials, and almost guarantees that they will not have the intended impact.

Sometimes, publishers were able to convince developers of the need to change their stance. For example, a set of materials (Project 10) included only a teacher's manual. The publisher had great difficulty in determining how to sell it because the sales force continued their practice of giving away the teacher's manual to generate interest in the materials. According to the publisher, the lack of a student component has implications for the success of the materials. First, there is little fiscal incentive for the sales force so the product is less competitive. Second, parents traditionally view student materials as a source of information about their children's lessons. Perhaps in response to both concerns, the new edition of the materials will include student workbooks and family worksheets.

The importance of a full intellectual partnership between developer and publisher is illustrated by publishers of two successful supplementary products. Staff at these companies had content knowledge that enabled them to identify secondary markets for the products, thus enhancing their profitability.

In sum, it appeared that effective partnerships between the two tended to be associated with a shared vision of the education reform agenda or a shared knowledge of important content principles embodied in the materials.

“Make sure that whoever is developing the product can develop a relationship with a publishing group that has not only the monetary resources to mount a good marketing program, but who is committed to the product's underlying principles.”
(Publisher Interview, Project 4).

They selected the publisher because they have a lot of respect for their professional standards. The staff includes many ex-high school teachers and educators. The company also has a strong track record of working with schools and districts interested in innovation, which will help them reach their target market. *(Summarized from Developer Interview, Project 21).*

The publisher attributed much of the success of their relationship with the developer to their ability to relate as colleagues to each other. This is largely possible because it has people on staff who can ‘speak the language’ of the developer, since they possess the technical knowledge. Working toward a common goal is crucial to the success of a product. *(Summarized from Publisher Interview, Project 23).*

“Selling” Reform

A common refrain from both developers and marketers was that success of the IMD program rests on creating a market for reform, which they judged did not currently exist.

“Teachers thought the developers were pushing the envelope on changing the way mathematics is taught to children, and they said schools and districts were not ready for all the parts of the curriculum.” (*Publisher Interview, Project 22*).

“High school coordinators are strongly committed to using textbooks and not more activity-based materials. Coordinators have a difficult time understanding a curriculum which has no textbook.” (*Publisher Interview, Project 26*).

“NSF needs to market itself to those teachers who need to change what they do. Lots of teachers have the viewpoint that NSF is out there in the ivory tower and doesn’t have a clue about life in a classroom. NSF would do [itself] good by getting out and promoting themselves as not just ivory tower pointy heads. They need to do a little public relations of their own within the teaching population.” (*Developer Interview, Project 10*).

“Frankly, the majority of teachers out there are not interested in changing the way they teach...Districts are looking to us to help change teachers’ attitudes regarding teaching methods, and that’s a tall order...If there’s any one thing NSF should do...in the next decade, it is *not* developing curriculum—though that’s important—[it is] the grassroots retooling of teachers...We’ve changed the books, now let’s change the teachers.” (*Publisher Interview, Project 10*).

Professional development is key to developing a critical mass of teachers who feel comfortable with changed roles and pedagogical approaches engendered by the materials. Publishers benefited from staff development as a marketing technique (see below), but they were frustrated by their own lack of capacity to provide the professional development necessary to prepare a wide variety of teachers to use the materials. For example, the publisher of one of the mathematics curricula reported:

As a publisher, they will do the “up and running” inservice, but they have neither the resources nor the skills to do the more in-depth version. (*Summarized from Publisher Interview, Project 10*).

Another publisher, of a number of the IMD products, said that staff had recently been grappling with the distinction between offering training required to support local implementation and offering much more extensive professional development that lays the groundwork for changing deeply rooted traditional teaching practices.

The publisher strongly believes that the scope of what is required to adequately prepare and equip teachers for doing things differently is far beyond any publisher’s capacity or responsibility to carry off. (*Summarized from Publisher Interview*).

In addition to using professional development to convince teachers of the need for reform of science, mathematics, and technology education, both developers and publishers argued for community outreach to develop support for reform. Developers at the high school level were particularly concerned about community support for reform.

“When thinking about reform, NSF needs to look far more broadly than just the teachers and the school districts. Parents and communities need to be educated and informed about the need for modifications in the curriculum.” (*Developer Interview, Project 23*).

The biggest single lesson he learned had to do with the level of public and community education that absolutely has to take place when introducing curricula like the one he helped develop. Because the product looks and is so radically different from what parents are used to, they experienced much more backlash against the product than they had anticipated. (*Summarized from Developer Interview, Project 5*).

In the absence of a large market, and without the necessary resources to provide adequate professional development and support to teachers to help create the market, some publishers focus on more superficial elements of the material in an attempt to sell to the “average” teacher. One large publisher believed it was important to package the materials so that they would look like traditional texts, even though the content is dramatically different from what is contained in those texts.

The product has lots of change and math reform in it. If you’re trying to make a program palatable to the middle ground teacher and you want them to try something new, you have to give them some of their comfort factors. (*Publisher Interview, Project 15*).

Marketing Strategies

To build awareness of the materials, all but two products were marketed using some combination of in-person seminars, hands-on workshops, booths at trade shows, brochures, presentations at professional conferences, catalog mailings, advertisements in journals, information on a web site, connecting with professional networks, and direct mailings. Two developers placed their materials on the web, and they did not reach a wide audience. Only two actively sought approval by state adoption authorities, and they were successful in marketing in the states in which they appeared on adoption lists. Others maintained that state adoption processes were expensive and conflict ridden, and were unlikely to yield enough to be worth the time and cost of pursuing approval. And, there was no effort by developers or publishers to build a market by targeting preservice educators.

Virtually all respondents agreed that in-person awareness seminars or hands-on workshops were by far the most effective means of increasing potential users’ understanding and interest in the materials. Marketers and developers found that giving such seminars at gatherings, such as professional association conferences, attended by members of existing professional networks yielded much interest.

In some cases, less expensive approaches were first attempted with less success, which led

the players to conclude that building a customer base requires face-to-face interaction.

“We found that what works best is an educational approach to marketing. We educate people to understand the product, as opposed to just purely promoting it and trying to wow them. Then the product sells itself.” (*Publisher Interview, Project 4*).

Direct mailings, videodisk demonstrations, brochures, NCTM conference presentations and displays, journal advertising, publications, and website postings were all used. However, marketers discovered that “you need a person there doing a demonstration. To market something at this level and price requires more hand-holding, and this caught us off guard.” (*Summarized from Publisher Interview, Project 1*).

A video has been produced promoting the materials along with brochures. But the most successful tool in promoting the product has been the hands-on teacher workshops. Here teachers get to try out the product for themselves. A marketer commented, “It’s like going out to dinner. Would you rather see pictures of the food or would you rather be allowed to try it?” (*Summarized from documents and Publisher Interview, Project 9*).

However, the high cost of professional development may provide the upper limit for dissemination through staff development.

“There is no way that we could structure the price of the materials in a way that would also support the cost of training... Publishers will sometimes earmark up to 5 percent of sales for professional support. In our case, that amount wouldn’t even come close to what would be necessary to adequately train teachers. For instance, if a teacher were going to teach 100 students, the district would spend \$3,500 [on instructional materials], which would provide \$175 for [teacher] training. The developers estimate that teachers need at least 2 weeks of training during the course of a school year, and it would cost them \$1,500 to provide that training—and that’s just for one year.” (*Publisher Interview, Project 28*).

Summary

The first sign of deviation from intention to implementation came when developers sought publishers, who, in turn sought to sell the materials. Even when publishers and developers shared the vision for reform-oriented materials, they faced real problems in the marketplace. Both groups talked of facing a small market share and the need to create demand for reform. Both also spoke of the limits publishers faced in providing the type of staff development that would increase the market share for IMD-funded materials.

Despite the costs, no other dissemination strategy was as effective as professional development, particularly with educators, including those who had participated in field tests or were active in professional networks, who were ready to embrace reform.