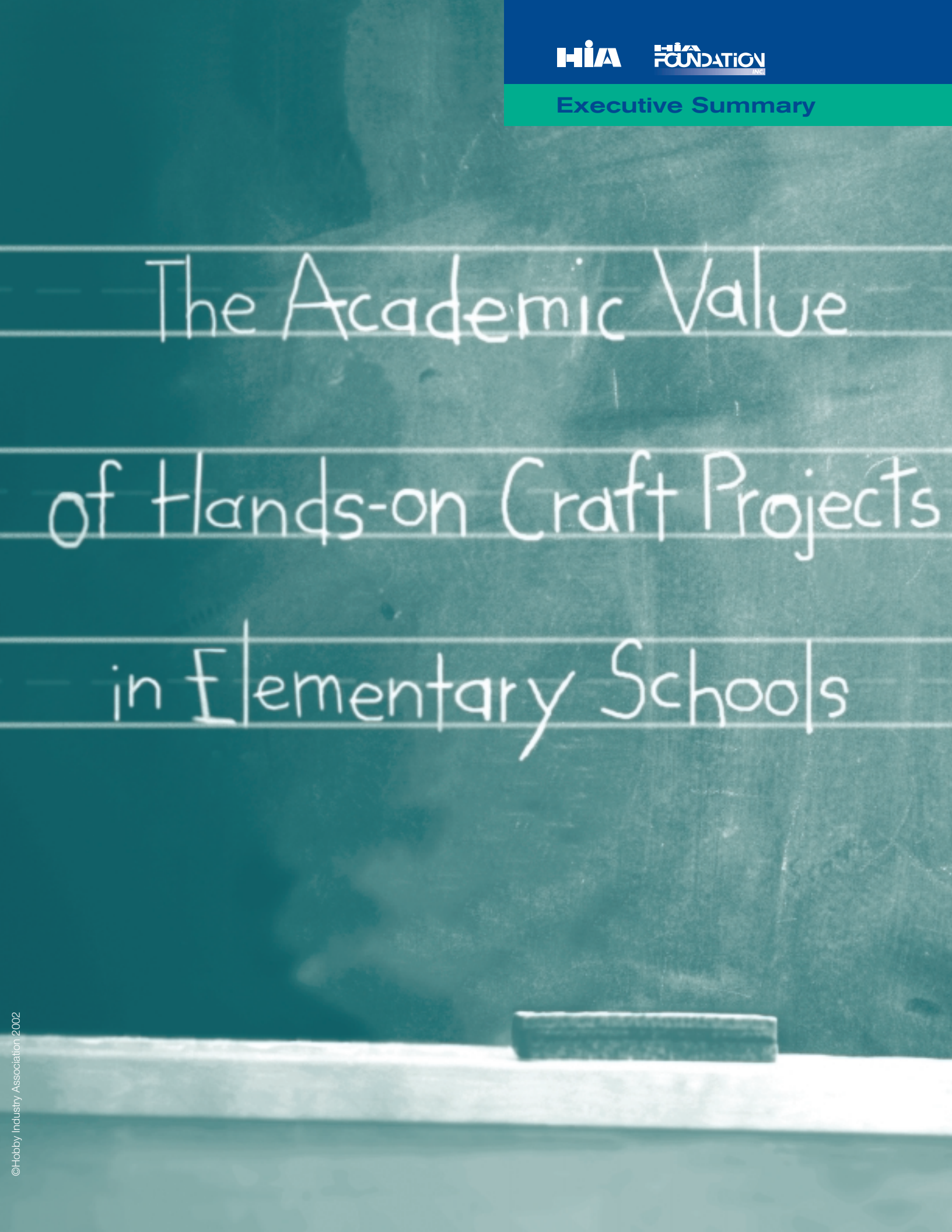
HIA HIA FOUNDATION INC

Executive Summary

The Academic Value of Hands-on Craft Projects in Elementary Schools



HIA

Executive Summary

Introduction

During the fall of 2001, the Hobby Industry Association (HIA) contracted ROCKMAN *ET AL*, an independent educational research and consulting company, to study the impact of hands-on craft projects as an instructional method within the core curriculum. Additionally, they wished to determine ways this teaching technique links to state and national education standards.

As the only large-scale study of its kind, and one of the first efforts to investigate the area of hands-on projects and academic learning, this study found that a significant number of teachers use hands-on projects linked to core curriculum content to advance standards-based learning. Teachers said hands-on projects enhance the instructional process and help students learn both basic information and more complex ideas. Additionally, students develop important learning skills and the abilities to articulate complex ideas, to use appropriate and sophisticated terminology, and to integrate the ideas they have learned into their continuing learning efforts. This belief was confirmed by student data evidence collected in this study.

Data Collection and Methodology

The research involved 76 teachers, with average teaching experience of 14.2 years, and more than 1,600 students in Kindergarten through Grade 6 from public and private schools in urban, suburban, and rural communities. Three types of data collection tools were developed:

- teacher surveys
- student surveys
- student knowledge application tasks, in which students, through writing and drawing, applied knowledge of what they had been studying to new, not previously studied, situations in order to measure their ability to apply or transfer knowledge

Key Findings

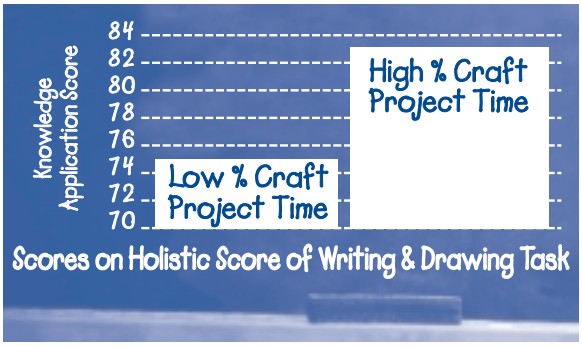
Student learning improves when classroom lessons incorporate hands-on craft projects.

Students who spent a greater proportion of their classroom learning time engaged in hands-on projects scored significantly higher on writing and drawing knowledge application tasks. In classes that spent almost half of instructional time on hands-on projects (48%), students scored an average of 83 out of a possible 100 on the knowledge application task. Comparatively, students whose classes devoted a low percentage of class time to craft projects (11.8%) scored an average of 75. The creativity and level of detail students demonstrated on the application tasks also indicated that the hands-on projects left many students with vivid and lasting understanding of both facts and concepts.

Teachers said that hands-on projects help students understand basic ideas (90%) as well as broader concepts (86%), and 82% of teachers said that handcrafted projects help their students apply information in new or different situations. Eighty-five percent (85%) of the teachers surveyed also agreed that long-term hands-on projects give students a greater depth of understanding than more conventional instructional methods.

"Kinesthetic and visual learners really benefit. They are much more apt to transfer their expertise and enthusiasm to reading and writing activities after having experienced the concepts with their eyes and hands."

—Research Participant–Educator



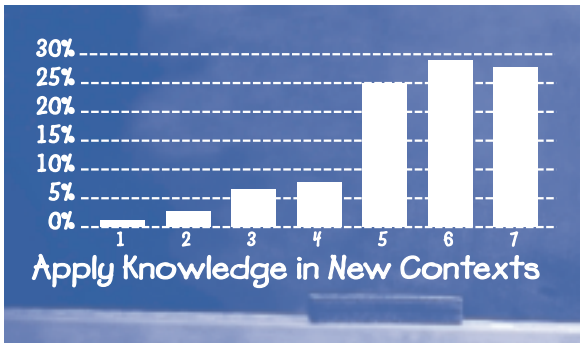
Teachers regularly use hands-on craft projects to teach the core subjects and link the projects to state and national curriculum standards.

Almost three-fourths (72%) of the participating teachers indicated that they explicitly and intentionally link their instructional units involving hands-on projects to state or national standards. In addition, writing, research and presentation skills are typically incorporated into the projects.

Teachers combine hands-on projects with a variety of other instructional activities when teaching an entire unit, and also give these hands-on projects a prominent role. When asked to break down instructional time among a variety of activities, teachers reported devoting the largest single portion of classroom time to the hands-on projects (30%), followed by direct instruction (20%) and class discussion (20%).

"I feel that hands-on craft activities are beneficial for all learners. While those who face challenges in their literacy learning have the opportunity to succeed in another 'forum,' strong academic learners benefit from using totally different criteria by which to express themselves."

—Research Participant–Educator



Students develop greater curiosity about the subject matter when hands-on craft projects are included.

Ninety-six percent (96%) of teachers agreed that students exhibit greater curiosity about the learning unit when hands-on projects are included in the instructional approach. Teachers also reported significant differences in learning behaviors when students are involved in hands-on projects. They reported increases in student motivation, willingness to ask questions and volunteer information, enthusiasm, and attention to assigned tasks.

Teachers say learning through hands-on craft projects accommodates students with different learning styles.

While 46% of teachers viewed hands-on projects as an effective learning technique for all students, 54% said this approach is particularly well suited for students who learned more effectively in non-traditional approaches, such as visual or kinesthetic learners, slow readers or writers, or non-native English speakers.

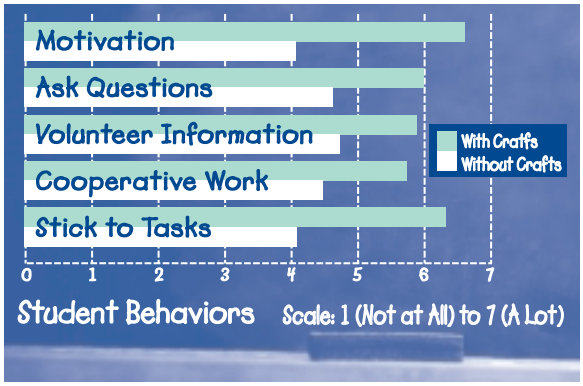
"I think all students benefit from craft projects. Certainly there are those who have a stronger artistic ability but everyone can be proud of something they make themselves. Students who may have other learning styles benefit too because they are challenged to excel in other areas."

—Research Participant–Educator

Student behavior and socialization skills improve when hands-on craft projects are undertaken.

Teachers reported enhanced cooperation, responsibility, dedication, confidence, and time management skills when students participated in hands-on projects. Eighty-five percent (85%) of the teachers said students work cooperatively on handcrafted projects, while only 50% of the teachers said they do so in non hands-on projects. On a seven-point scale, teachers observed greater cooperative behavior (5.8) and perseverance (6.4) by students during learning activities involving hands-on projects than they observed during learning activities without hands-on projects (4.5 and 4.1 respectively).

Thirty-five percent (35%) of students indicated that, of what they do in school, they are most proud of a hands-on project they created. This was followed by success on a hard test, selected by 28% of the students. Eighty-six percent (86%) of the students felt that sharing results with others is very or somewhat important.



Conclusion

The study concludes that hands-on craft projects are an effective means of teaching a standards-based curriculum and that students develop both a greater appreciation for and understanding of what they are learning.

Hands-on projects appear to function as learning anchors that organize and integrate various classroom-learning activities. Learning anchors ground the classroom community around a shared set of integrated goals and activities and help make aspects of what the students need to learn more visible and explicit in a way that abstract conceptual learning rarely does. Hands-on projects also facilitate productive socialization by having students work together on a common effort that yields a tangible product.

These active learning activities expand educational experiences beyond the traditional and passive practices of teaching and learning, by incorporating creation, expression, and presentation of ideas. These experiences, this study finds, result in students' greater ability to transfer skills and ideas to new contexts. By making the learning experience concrete, the dynamics of these learning anchors inspire students to enjoy learning, accomplish goals, take pride in their achievements, and persevere in their learning.

A Message From the Chair

The Academic Value of Hands-on Craft Projects in Elementary Schools Study validates what educators and members of the craft & hobby industry have believed for years: hands-on activities enhance the learning process. Findings show that children comprehend and apply knowledge better after participation in hands-on learning activities and, they develop new behavior and socialization skills as well.

This is great news for innovative teachers who use a variety of activities in the classroom to engage and motivate their students. The study also makes the case for increasing financial resources for teachers who want to incorporate more hands-on activities in the classroom. Parents will also be more likely to encourage the use of hands-on learning activities in the classroom and at home.

For the craft & hobby industry, this study proves the continuing relevance of the age old tradition of combining learning with crafts. We hope that all members of the craft & hobby industry take the results of this study to heart and apply this knowledge to the creation of project ideas and new products that continue to inspire teachers and children in the age of technology.

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The Hobby Industry Association (HIA) is an international trade association of 4,800 craft & hobby merchandisers. Its major services to members include programs of professional development, publications, tracking of issues of national concern and promotion of the industry through adherence to it stated objective. HIA's mission is to facilitate the sales growth of the craft and hobby industry.

The HIA Foundation Inc. is dedicated to supporting youth education and the future of crafts and hobbies in society.

Crafts.
Discover life's little pleasures.